

NEW SOURCE CONSTRUCTION and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**VIM Recycling, Inc.
29861 Old US Hwy. 33
Elkhart, Indiana 46516**

(Herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, (326 IAC 2-5.1 if new source), 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-12174-00538	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Minor Source Operating Permit [326 IAC 2-6.1]

C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]
- C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.6 Permit Revocation [326 IAC 2-1-9]
- C.7 Opacity [326 IAC 5-1]
- C.8 Fugitive Dust Emissions [326 IAC 6-4]
- C.9 Fugitive Particulate Matter Emission Limitation [326 IAC 6-5]
- C.10 Stack Height [326 IAC 1-7]

Testing Requirements

- C.11 Performance Testing [326 IAC 3-6]
- C.12 Compliance Monitoring [326 IAC 2-1.1-11]
- C.13 Maintenance of Monitoring Equipment [IC 13-14-1-13]
- C.14 Monitoring Methods [326 IAC 3]
- C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

Record Keeping and Reporting Requirements

- C.16 Malfunctions Report [326 IAC 1-6-2]
- C.17 Annual Emission Statement [326 IAC 2-6]
- C.18 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.19 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- C.21 Annual Notification [326 IAC 2-6.1-5(a)(5)]

D.1 Indoor Grinding and Screening of Wood

Emission Limitations and Standards

- D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

D.1.3 Particulate Matter (PM)

D.1.4 Testing Requirements

Compliance Monitoring Requirements

D.1.5 Visible Emission Notations

D.1.6 Baghouse Inspections

D.1.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements

D.1.8 Record Keeping and Reporting Requirements

D.2 Outdoor Grinding and Screening of “Recently Live” Wood

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

D.2.2 Fugitive Dust Emissions [326 IAC 6-4-1, 6-4-2]

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-1.1-11]

D.2.4 Control of Fugitive Dust

Compliance Monitoring Requirements

D.2.5 Visible Emissions Observations

D.2.6 Preventive Maintenance Plan

Record Keeping and Reporting Requirements

D.2.7 Record Keeping Requirements

D.2.8 Reporting Requirements

D.3 Internal Combustion Facilities

Emission Limitations and Standards

D.3.1 NO_x Emissions Limitation

D.3.2 Fuel Oil Limitation

Compliance Determination Requirements

D.3.3 Compliance Determination

D.3.4 Testing Requirements

Record Keeping and Reporting Requirements

D.3.5 Record Keeping Requirements

D.3.6 Reporting Requirements

Quarterly Report

Malfunction Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a woodworking operation, using recycled wood as a raw material.

Authorized Individual: Kenneth R. Will
Source Address: 29861 Old US Hwy. 33, Elkhart 46516
Mailing Address: 64654 US 33, Goshen, Indiana 46526
Phone Number: 219-642-3677
SIC code: 2499
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, PSD Rules;

A.2 Emissions units and Pollution Control Equipment Summary

This construction permit consists of following emissions units and pollution control devices:

- (a) One (1) CBI wood grinder and screen separator, identified as CBI, with a maximum capacity to grind 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 1X.
- (b) One (1) "B" and "C" material transporter and screen, identified as B, C Transport & Screen, with a maximum capacity to mechanically transport and screen 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 2X.
- (c) One (1) Bliss wood grinder, identified as Bliss, with a maximum capacity to grind 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.
- (d) One (1) "A" material transporter and screen, identified as A Transport & Screen, with a maximum capacity to mechanically transport and screen 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.
- (e) One (1) CBI wood grinder with screen separator, identified as CBI, with a maximum capacity to grind 25 tons of "recently live" wood per hour, grinding of "recently live"¹ wood outdoors on VIM property, and controlling emissions of fugitive particles by 1) maintaining moisture at the grinding process at all times the process is conducted; and 2) grinding

"recently live" wood outdoors only when wind speeds at the VIM property measures less than ten (10) miles per hour; and 3) conducting continuous visual observation to assure that no visible particulate is crossing the VIM property line at any time while the process is in operation. (NOTE: this is the same CBI grinder which will be used indoors in the "First Grind" process.)

- (f) One (1) Olathe wood grinder with screen separator, identified as Olathe, with a maximum capacity to grind 25 tons of "recently live" wood per hour, grinding "recently live" wood outdoors on the VIM property, and controlling emissions of fugitive particulate by 1) maintaining moisture at the grinding process at all times the process is conducted; and 2) grinding recently live wood only when wind speed at the VIM property measures less than ten (10) miles per hour; and 3) conducting continuous visual observation to assure that no visible particulate is crossing the VIM property line at any time while the process is in operation.
- (g) One (1) CBI wood grinder diesel motor, 800 hp/hr maximum capacity, exhausting to Collector 1X when grinding indoors, exhausting to a mobile engine exhaust when grinding outdoors.
- (h) One (1) Olathe wood grinder diesel motor, 312 hp/hr maximum capacity, exhausting to a mobile engine exhaust when grinding outdoors

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done

continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit any combination of Regulated Air Pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM shall issue a revised permit.
The notification shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause, which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

The Permittee shall fully implement the Fugitive Dust Control Plan dated July 17, 2000, as seen in Attachment A, upon completion of construction. Until that time, the plan shall be implemented within portions of the site where construction is considered to be complete. Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed.

- (a) Using wet suppression on storage piles, unpaved roads and areas, and while outdoor grinding and screening outdoors to prevent visible fugitive dust from crossing the VIM property line.
- (b) Grinding and screening outdoors when wind speeds, at the VIM property, measure less than ten (10) miles per hour.
- (c) Grinding only recently live wood outdoors
- (d) Cleaning paved roads and areas.

C.10 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.11 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) IDEM, OAM, must receive all test reports within forty-five (45) days after the completion of the testing. The IDEM, OAM may grant an extension, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.12 Compliance Monitoring [326 IAC 2-1.1-11] [40 CFR PART 75.4]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.13 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated

whenever indicated.

C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously

- submitted a request for an administrative amendment to the permit, and such request has not been denied or;
- (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15th of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be

submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.18 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.19 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
- (1) The dates, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.21 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

SECTION D.1 FACILITY OPERATION CONDITIONS

Indoor Grinding and Screening of Wood

- (a) One (1) CBI wood grinder and screen separator, identified as CBI, with a maximum capacity to grind 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 1X.
- (b) One (1) "B" and "C" material transporter and screen, identified as B,C Transport & Screen, with a maximum capacity to mechanically transport and screen 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 2X.
- (c) One (1) Bliss wood grinder, identified as Bliss, with a maximum capacity to grind 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.
- (d) One (1) "A" material transporter and screen, identified as A Transport & Screen, with a maximum capacity to mechanically transport and screen 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 the allowable emission rates from the Bliss grinder and Transport screen is 18.82 pounds per hour at a process weight of 25 tons per hour, after control.
- (b) Pursuant to 326 IAC 6-3 the allowable emission rates from the CBI grinder is 14.92 pounds per hour at a process weight of 75 tons per hour, after control.
- (c) Pursuant to 326 IAC 6-3 the allowable emission rates from the B,C Transport & Screen is 2.72 pounds per hour at a process weight rate of 75 tons per hour, after control.
- (d) The particulate matter (PM) from the grinding, transporting and screening systems was limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

and

Interpolation and extrapolation of the data for the process weight rate in excess of sixty

thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emission units and any control devices.

Compliance Determination Requirements

D.1.3 Particulate Matter (PM)

The baghouses, identified as Collector 1, Collector 2 and Collector 3, for PM control shall be in operation at all times during operation of grinders, mechanical conveyors and screens.

D.1.4 Testing Requirements

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the particulate matter (PM) limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Visible Emission Notations

- (a) Daily visible emission notations of the grinding and screening stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter.

D.1.7 Broken or Failed Bag Detection

- (a) In the event that bag failure has been observed:
 - (1) The affected compartments will be shut down immediately until the failed units

have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

- (2) Operations may continue only if the event qualifies as a malfunction and the Permittee satisfies the requirements of the Malfunctions Report Condition of this permit (Section C – Malfunctions Report [326 IAC 1-6-2]).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as a malfunction and the Permittee satisfies the requirements of the Malfunctions Report Condition of this permit (Section – C Malfunctions Report [326 IAC 1-2-6]).

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping and Reporting Requirements

- (a) The Permittee shall maintain daily records of the pressure drop across the baghouses.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the inspection required under Condition D.1.5 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Outdoor Grinding and Screening of "Recently Live" Wood

- (a) One (1) CBI wood grinder with screen separator, identified as CBI, with a maximum capacity to grind 25 tons of "recently live" wood per hour, grinding of "recently live" wood outdoors on VIM property, and controlling emissions of fugitive particles. (NOTE: this is the same CBI grinder which will be used indoors in the "First Grind" process.)
- (b) One (1) Olathe wood grinder with screen separator, identified as Olathe, with a maximum capacity to grind 25 tons of "recently live" wood per hour, grinding "recently live" wood outdoors on the VIM property, and controlling emissions of fugitive particulate.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 the allowable emission rate from the CBI grinder is 18.42 pounds per hour at a process weight of 25 tons per hour.
- (b) Pursuant to 326 IAC 6-3 the allowable emissions rate from the Olathe grinder is 18.42 pounds per hour at a process weight rate of 25 tons per hour.
- (c) The particulate matter (PM) from the grinding system was based on the following:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Fugitive Dust Emissions [326 IAC 6-4-1, 6-4-2]

Emissions from fugitive dust from the grinding process system listed in D.2 shall be limited to less than the following:

- (1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

P = Percentage increase

R = Number of particles of fugitive dust measured at the downward receptor site

U = Number of particles of fugitive dust measured at upwind of background site

- (2) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$P_R = (1.5 \pm N) * P$$

N = Fraction of fugitive dust that is respirable dust

P_R = allowable percentage increase in dust concentration above
backgrounds

P = no value greater than sixty-seven percent (67%)

- (3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (4) Visible fugitive dust crossing the VIM property, observed by a qualified individual, is a violation of 326 IAC 6-4. This subdivision may be refuted by factual data expressed in subdivision (1), (2) or (3) of this section.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emission units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the particulate matter (PM) limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Control of Fugitive Dust

The source shall control emissions of fugitive particulate from the process described in D.2 by the following methods:

- (1) Maintaining moisture, by wet suppression to reduce fugitive particulate matter at the grinding and screening operation, at all times this process is conducted;
- (2) Grinding *only* "recently live" wood outdoors, when the wind speed at the VIM property measures less than ten (10) miles per hour;
- (3) Conducting outdoor grinding of "recently live" wood a maximum of eight (8) hours in any day.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Visible Emissions Observations

-
- (a) The source shall conduct continuous visual observations, by a trained employee to assure that no visible particulate is crossing the VIM property line at any time while the process described in D.2 is in operation.
 - (b) The source shall measure the wind speed prior to beginning outdoor grinding, and shall continue to measure wind speed hourly while grinding outdoors to assure that the limitation in D.2.4 (10 mph wind speed) is being followed.
 - (c) A trained employee is an employee who has worked at the plant at least one (1) month

and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

D.2.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.7 Record Keeping and Reporting Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible observations of fugitive particulate emissions and wind speed. These records and the records of hours of observation for the process described in D.2.5 shall be maintained in accordance with Condition C.19.

D.2.8 Reporting Requirements

An “Emergency/Deviation” report shall be made in the event a violation of 326 IAC 6-2-4 is observed, as described in Section C – General Reporting Requirements.

SECTION D.3 FACILITY OPERATION CONDITIONS

Internal Combustion Facilities

- (a) One (1) CBI wood grinder diesel motor, 800 hp/hr maximum capacity, exhausting to Control 1X when grinding indoors, exhausting to a mobile engine exhaust when grinding outdoors.
- (b) One (1) Olathe wood grinder diesel motor, 312 hp/hr maximum capacity, exhausting to a mobile engine exhaust when grinding outdoors.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 NO_x Emissions Limitation

The potential to emit of NO_x from the two (2) grinders shall be limited to less than 40 tons per hour per twelve (12) consecutive month period, rolled on a monthly basis.

D.3.2 Fuel Oil Limitation

- (a) The total input of diesel fuel for the two (2) grinders (CBI and Olathe) shall be limited to the following (based on an assumed diesel heating value of 137,000 Btu per gallon):

- (1) CBI grinder: 147,168 gallons per 12 consecutive month period, rolled on a monthly basis
 - (2) Olathe grinder: 15,456 gallons per 12 consecutive month period, rolled on a monthly basis

- (b) The maximum sulfur content of the diesel fuel shall not exceed 0.5%

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.3.3 Compliance Determination

Compliance with Condition D.3.1 shall be demonstrated within 30 days of the end of each month based on the fuel consumption for each grinder.

D.3.4 Testing Requirements

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the NO_x limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.3.5 Record Keeping and Reporting Requirements

To document compliance with Condition D.3.2, the Permittee shall maintain records of monthly fuel usage. Records maintained shall be complete and sufficient to establish compliance with the NO_x usage emission limit established in Condition D.3.1.

D.3.6 Reporting Requirements

A quarterly report of fuel usage of the facilities described in D.3.2 shall be made to the Office of Air Management

**Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section**

Quarterly Report

Company Name: VIM Recycling, Inc.
Location: 29861 Old US Hwy. 33, Elkhart, IN 46516
Permit No.: 039-12174-00538
Source: Two (2) diesel grinders (CBI and Olathe)
Pollutant: NO_x
Limit: 147,168 gallons per 12 consecutive month period for the CBI grinder
15,456 gallons per 12 consecutive month period for the Olathe grinder

Year: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	CBI	Olathe	CBI	Olathe	CBI	Olathe
Month 1						
Month 2						
Month 3						

☐ No deviation occurred in this quarter

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? _____, 25 TONS/YEAR SULFUR DIOXIDE ? _____, 25 TONS/YEAR NITROGEN OXIDES? _____, 25 TONS/YEAR VOC ? _____, 25 TONS/YEAR HYDROGEN SULFIDE ? _____, 25 TONS/YEAR TOTAL REDUCED SULFUR ? _____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? _____, 25 TONS/YEAR FLUORIDES ? _____, 100TONS/YEAR CARBON MONOXIDE ? _____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? _____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? _____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? _____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? _____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL * SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

****Essential services*** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: VIM Recycling, Inc.
Source Location: 29861 Old US Hwy 33, Elkhart, IN 46516
County: Elkhart
SIC Code: 2499
Operation Permit No.: 039-12174-00538
Permit Reviewer: David Howard

On June 5, 2000, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that VIM Recycling, Inc. had applied for a construction permit to construct and operate a wood grinding operation with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 13, 2000, VIM Recycling, Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded and crossed out for emphasis):

Comment 1: Condition D.2.4(3), VIM requests that this be changed to eight (8) hours in any one day.

Response 1: The Office of Management (OAM) has revised Condition D.2.4(3) as follows:
Conducting outdoor grinding of "recently live" wood a maximum of eight (8) hours in any ~~week~~ **day**.
This revision will not change the fuel usage limit established in D.3.2(a).

On June 20, 2000, Lorna Rickard of CLEAN Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

Comment 2: No outside grinding or screening.

Response 3: The OAM cannot prohibit outdoor grinding and screening of wood as long as the operation is within the bounds of the rules set forth in 326 IAC and the conditions of this permit.

Comment 3: Pallets and wood should be the only material ground at this site. No gypsum, etc.

Response 3: The application lists only wood to be ground at this site.

Comment 4: No outside storage. (Note: This has been a major problem at their present site because of fire hazard)

Response 4: The OAM cannot prohibit outdoor storage for the same reasons addressed in Response 3. Also, the OAM has no jurisdiction over potential fire hazards.

Comment 5: All roads and entrances need to be covered with gravel or a dust free substance to protect adjoining property owners from dust.

Response 5: At the request of the OAM, VIM has submitted a Fugitive Dust Control Plan. See

Attachment A of this document for the Fugitive Dust Control Plan. This plan addresses all potential sources of fugitive dust, including unpaved roadways and areas.

Upon further review, OAM has made the following changes (changes are bolded and crossed out for emphasis):

1. In the permit, the term "green" wood is use to defined wood as trees (including trunk, branches, and leaves) which have not been cured and contain approximately 40 percent moisture content. Due to the variability of drying times, diameter of the wood, initial moisture content, and different types of species of wood to be ground outdoors the term "green" wood will be replaced with "recently live" wood. The term "recently live" will be defined as wood, including trunk, branches and leaves, that has not been processed or cut into dimensional lumber, stored no longer than sixty (60) days onsite. All references made to "green" wood will be changed to "recently live".
2. A.2 (e) has been revised as follows (changes are bolded and crossed out for emphasis):
 - (e) One (1) CBI wood grinder with screen separator, identified as CBI, with a maximum capacity to grind 25 tons of "green" wood per hour, grinding of "green" wood outdoors on VIM property, and controlling emissions of fugitive particles by 1) maintaining moisture at the grinding process at all times the process is conducted; and 2) grinding "green" wood outdoors only when wind speeds ~~are at~~ **at** the VIM property measures less than ten (10) miles per hour; and 3) conducting continuous visual observation to assure that no visible particulate is crossing the VIM property line at any time while the process is in operation. (NOTE: this is the same CBI grinder which will be used indoors in the "First Grind" process.)
3. D.1.2 is revised as follows (changes are bolded and crossed out for emphasis):

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for ~~this these~~ **these** emission ~~unit units~~ **units** and any control devices.
4. D.2.6 is revised as follows (changes are bolded and crossed out for emphasis):

A Preventive Maintenance Plan, in accordance with Section C – Preventive Maintenance Plan, of this permit, is required for ~~this these~~ **these** ~~facility facilities~~ **facilities** and any control ~~devices~~ **devices**.
5. D.2.2 (4) has been revised as follows to clarify the intent of this condition (changes are bolded and crossed out for emphasis):
 - (1) ~~If fugitive dust is visible crossing the boundary or property line of a source.~~ **Visible fugitive dust crossing the VIM property, observed by a qualified individual, is a violation of 326 IAC 6-4.** This subdivision may be refuted by factual data expressed in subdivision (1), (2) or (3) of this section.
6. Condition D.2.4(1) has been revised to indicate the procedure that will be used to maintain moisture at the grinding process (changes are bolded and crossed out for emphasis);

D.2.4 Control of Fugitive Dust

The source shall control emissions of fugitive particulate from the process described in D.2 by the following methods:

- (1) Maintaining moisture, **by wet suppression to reduce fugitive particulate matter at the grinding and screening operation**, at all times this process is conducted;
- (2) Grinding *only* "recently live" wood outdoors, when the wind speed at the VIM property

measures less than ten (10) miles per hour;

(3) Conducting outdoor grinding of "recently live" wood a maximum of eight (8) hours in any day.

7. At the request of the Office of Air Management, VIM submitted a Fugitive Dust Control Plan pursuant to 326 IAC 6-5. See Attachment A of this document for Fugitive Dust Control Plan. To incorporate the plan into the permit a condition was added into the C section. The new C condition reads as follows:

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

The Permittee shall fully implement the Fugitive Dust Control Plan dated July 17, 2000, as seen in Attachment A, upon issuance of this permit. Until that time, the plan shall be implemented within portions of the site where construction is considered to be complete. Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed. The plan consist of the following:

- (a) **Using wet suppression on storage piles, unpaved roads and areas, and while outdoor grinding and screening outdoors to prevent visible fugitive dust from crossing the VIM property line.**
- (b) **Grinding and screening outdoors when wind speeds, at the VIM property, measure less than ten (10) miles per hour.**
- (c) **Grinding only recently live wood outdoors**
- (d) **Cleaning paved roads and areas.**

8. In the original application submitted by VIM, fugitive dust from storage piles and unpaved roads was not addressed. The OAM requested the source to submit Form AA and Form G in order to account for the potential for fugitive dust from storage piles and unpaved roads. Calculations for fugitive dust from storage piles and unpaved roads can be seen in Appendix A of this document.
9. The TSD indicated there were unpermitted emission units, to clarify, there are no unpermitted units at the site. The TSD should have read as follows:

New Emission Units and Pollution Control Equipment

The source consists of the following ~~unpermitted~~ **new** emission units and pollution control devices:

10. The permit contains a fuel usage limitation; however, the TSD specifies an hours of operation limit. To clarify, the source will be limited under the fuel usage limit, not the hours of operation limit. The fuel usage limit established is based on the hours of operation proposed by the source.
11. The following conditions have been added to the D.1.7 section (changes are crossed out and bolded for emphasis):
- ~~(b) In addition to the quarterly report required by C.19, an annual emission statement shall be submitted each April 15th for emissions from processes described in D.1~~
 - ~~(c) An "Emergency Reduction" report shall be made in the event of failure of a baghouse as described in C.19(e)~~
 - (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the inspection required under Condition D.1.5 and the**

dates the vents are redirected

- (c) **All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit**

12. The following condition has been added as D.1.5 with the remaining conditions renumbered:

D.1.5 Visible Emission Notations

- (a) **Daily visible emission notations of the grinding and screening stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.**
- (b) **For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**
- (c) **In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**
- (d) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
- (d) **The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.**

13. The following has been added to D.2.5 to define what classifies as a trained employee.

- (c) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**

14. The following change has been made to D.3.6

D.3.6 Reporting Requirements

A quarterly report of ~~hours of operation~~ **fuel usage** of the facilities described in D.3.2 shall be made to the Office of Air Management.

15. The potential to emit from the source is greater than 100 tons per year of criteria pollutants; however the source has decided to take a limit of less than 100 tons per year, and apply for a permit under the FESOP permitting program. The OAM will initiate the FESOP review after the issuance of this permit. Therefore Condition A.3 and B.6(d) and (e) will be removed from the permit. The changes are as follows (changes crossed out and bolded for emphasis):

~~A.3 Part 70 Permit Applicability [326 IAC 2-7-2]~~

~~This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:~~

- ~~(a) It is a major source, as defined in 326 IAC 2-7-1(22);~~
- ~~(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 – Applicability).~~

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- ~~(d) Pursuant to 326 IAC 2-7-19 (Fees) the operation permit will be subject to annual operating permit fees.~~
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).**
- ~~(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.~~

16. The limit to remain a minor source is less than 100 tons per year of all criteria pollutants, however, the source wants to take a NO_x limit of 40 tons per year to make accounting for emission easier in the event the source decides to add additional units in the future, and still stay a FESOP.

17. Condition C.20 General Reporting Requirements has been changed as follows (changes crossed out and bolded for emphasis):

C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a ~~Quarterly~~ **Semi Annual** Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

18. Conditions D.1.1 and D.2.1 have been changed to better illustrate the purpose of the conditions. The conditions are now as follows (changes crossed out and bolded for emphasis):

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 the allowable emission rates from the Bliss grinder and Transport screen is 18.82 pounds per hour at a process weight of 25 tons per hour,**

after control.

- (b) Pursuant to 326 IAC 6-3 the allowable emission rates from the CBI grinder is 14.92 pounds per hour at a process weight of 75 tons per hour, after control.**
- (c) Pursuant to 326 IAC 6-3 the allowable emission rates from the B,C Transport & Screen is 2.72 pounds per hour at a process weight rate of 75 tons per hour, after control.**
- (d) The particulate matter (PM) from the grinding, transporting and screening systems was limited by the following:**

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

and

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

~~Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall not exceed 35.43 pounds per hour when operating at a process weight rate of 25 tons per hour.~~

~~The pounds per hour limitation was calculated with the following equation:~~

- (a) Pursuant to 326 IAC 6-3 the allowable emission rate from the CBI grinder is 18.42 pounds per hour at a process weight of 25 tons per hour.**
- (b) Pursuant to 326 IAC 6-3 the allowable emissions rate from the Olathe grinder is 18.42 pounds per hour at a process weight rate of 25 tons per hour.**
- (c) The particulate matter (PM) from the grinding system shall be limited by the following:**

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

19. The following condition has been changed because the source is not subject to a Part 70 permit. The source will be issued a FESOP after the issuance of this permit. Until the FESOP is issued, the source has to comply with following (changes are crossed out and bolded for emphasis):

C.3 Source Modification [326 IAC 2-7-10.5]

-
- ~~(a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or~~

~~otherwise modify the source.~~

- ~~(b) Any application requesting an amendment or modification of this permit shall be submitted to:~~

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.~~

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

**Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015**

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

20. The following change has been made to D.3.2, in order to express the fuel usage limitation in gallons per year (changes are crossed out and bolded for emphasis):

D.3.2 Fuel Oil Limitation

- (a) The total input of diesel fuel for the two (2) grinders (CBI and Olathe) shall be limited to the following (based on an assumed diesel heating value of 137,000 Btu per gallon):
- (1) CBI grinder: ~~12,264 gallons per month~~ **147,168 gallons per 12 consecutive month period, rolled on a monthly basis**
- (2) Olathe grinder: ~~1,288 gallons per month~~ **15,456 gallons per 12 consecutive month period, rolled on a monthly basis**

~~The fuel usage limitation for the two (2) grinders (CBI and Olathe) is equivalent to limited hours of operation of 3,640 and 1,040 hours per year, respectively.~~

- (b) The maximum sulfur content of the diesel fuel shall not exceed 0.5%

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: VIM Recycling, Inc.
Source Location: 29861 Old US Hwy 33, Elkhart, IN 46516
County: Elkhart
SIC Code: 2499
Operation Permit No.: 039-12174-00538
Permit Reviewer: David Howard

The Office of Air Management (OAM) has reviewed an application from VIM Recycling, Inc. relating to an operation that manufactures wood products, using recycled wood as raw material.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units and pollution control devices:

- (a) One (1) CBI wood grinder and screen separator, identified as CBI, with a maximum capacity to grind 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 1X.
- (b) One (1) "B" and "C" material transporter and screen, identified as B, C Transport & Screen, with a maximum capacity to mechanically transport and screen 75 tons of wood per hour, using a baghouse for control of particulate matter emissions and exhausting to one (1) stack designated Collector 2X.
- (c) One (1) Bliss wood grinder, identified as Bliss, with a maximum capacity to grind 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.
- (d) One (1) "A" material transporter and screen, identified as A Transport & Screen, with a maximum capacity to mechanically transport and screen 25 tons of wood per hour, using a baghouse for control of particulate matter emissions, and exhausting to one (1) stack designated Collector 3X.
- (e) One (1) CBI wood grinder with screen separator, identified as CBI, with a maximum capacity to grind 25 tons of "green" wood per hour, grinding of "green" wood outdoors on VIM property, and controlling emissions of fugitive particles by 1) maintaining moisture at the grinding process at all times the process is conducted; and 2) grinding "green" wood outdoors only when wind speeds at the VIM property measures less than ten (10) miles per hour; and 3) conducting continuous visual observation to assure that no visible particulate is crossing the VIM property line at any time while the process is in operation. (NOTE: this is the same CBI grinder which will be used indoors in the "First Grind" process.)

- (f) One (1) Olathe wood grinder with screen separator, identified as Olathe, with a maximum capacity to grind 25 tons of "green" wood per hour, grinding "green" wood outdoors on the VIM property, and controlling emissions of fugitive particulate by 1) maintaining moisture at the grinding process at all times the process is conducted; and 2) grinding green woods only when wind speed at the VIM property measures less than ten (10) miles per hour; and 3) conducting continuous visual observation to assure that no visible particulate is crossing the VIM property line at any time while the process is in operation.
- (g) One (1) CBI wood grinder diesel motor, 800 hp/hr maximum capacity, exhausting to Collector 1X when grinding indoors, exhausting to a mobile engine exhaust when grinding outdoors.
- (h) One (1) Olathe wood grinder diesel motor, 312 hp/hr maximum capacity, exhausting to a mobile engine exhaust when grinding outdoors.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
Collector 1X	Dust Collection	25	6	85,590	68
Collector 2X	Dust Collection	25	3	16,250	68
Collector 3X	Dust Collection	25	6	71,100	68

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on April 17, 2000.

Emission Calculations

See Appendix A (Emission Calculation Spreadsheets for woodworking operation and diesel engines) of this document for detailed calculations (five (5) pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	103.1
PM-10	101.67
SO ₂	16.09
VOC	5.86
CO	31.43
NO _x	126.49

HAP's	Potential To Emit (tons/year)
Benzene	0.03
Toluene	0.01
Xylenes	0.01
Propylene	0.1
Formaldehyde	0.01
Acetaldehyde	0.01
Total	0.17

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_x and particulate matter (PM and PM₁₀) are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule
- (b) Applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Elkhart County has been classified as attainment or unclassifiable for SO₂, PM₁₀, and CO. Therefore, these emissions were reviewed pursuant to the requirements for

Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr.)
PM	36.67
PM10	36.17
SO ₂	5.83
VOC	1.41
CO	10.38
NO _x	39.93
Single HAP	0.08
Combination HAPs	0.12

Emissions based on limited hours of operation: Olathe (1040 hrs/yr.) and CBI (3640 hrs/yr.)

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

The source has agreed to limit the hours of operation to the above as an enforceable condition of the permit, so as not to exceed NO_x emissions greater than 100 tons per year. The source will maintain a log of hours of operation of the Olathe and CBI diesel engines to demonstrate compliance with this condition.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutants is greater than or equal to 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
- (c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

326 IAC 12 and 40 CFR Part 60 (New Source Performance Standards)

There are no New Source Performance Standards applicable to this source.

326 IAC 14 and 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants)

There are no National Emission Standards for Hazardous Air Pollutants that are applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

- (a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emissions units;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMP(s) as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM and OAM upon request and shall be subject to review and approval by IDEM and OAM.

326 IAC 2-2 (PSD Rules)

- (a) The total source potential to emit criteria pollutants is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD Rules) and 40 CFR 52.21 will not apply.
- (b) Any change or modification that may increase potential to emit to 250 tons per year, from the equipment covered in this permit, shall obtain OAM approval before such change may occur.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (c) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute non overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Woodworking Operation

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the grinding, transporting and screening shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

and

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times during the wood grinding, transporting and screening operation, in order to comply with this limit.

326 IAC 6-4-2 Fugitive Dust Emissions Limitations

Pursuant to 326 IAC 6-4-2, emissions of particulate from outdoor “green” wood grinding shall be limited according to less than the following:

- (1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

P = Percentage increase

R = Number of particles of fugitive dust measured at the downward receptor site

U = Number of particles of fugitive dust measured at upwind of background site

- (2) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$P_R = (1.5 \pm N) * P$$

N = Fraction of fugitive dust that is respirable dust

P_R = allowable percentage increase in dust concentration above backgrounds

P = no value greater than sixty-seven percent (67%)

- (3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

- (4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivision (1), (2) or (3) of this section.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those that constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached Appendix A, page 2 through 5, for detailed air toxic calculations.

Conclusion

The construction and operation of this woodworking operation that manufactures landscape mulch, wood fuel and animal bedding shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 037-12174-00538.

Appendix A: Emission Calculations
Particulate Matter from Woodworking Operation

Page 1 of 7

Company Name: VIM Recycling, Inc.
Address City IN Zip: 29861 Old US Hwy. 33 Elkhart, IN 46516
CP#: 039-12174
Plt ID: 039-00538
Reviewer: David Howard

Calculation of grain loading

	Collector 1	Collector 2	Collector 3
grains/lb	7000	7000	7000
grains/hr at inlet	30779000	2926000	42497000
grains/min at inlet	512983.33	48766.67	708283.33
Collection Efficiency	99.75	99.5	99.85
grains/min discharged	1282.46	243.83	1062.42
acfm	85,590	16,250	71,100
grains/cu ft	0.0150	0.0150	0.0149

Calculation of PTE, Actual Emissions

AFTER CONTROL:

	lbs/hr	tons/hr	PTE, TPY (8760)	Hours/yr dept.	by TPY Actual Emissions
Collector 1	10.99	0.0055	48.14	2600	14.29
Collector 2	2.09	0.0010	9.15	2600	2.72
Collector 3	9.11	0.0046	39.90	4000	18.22
Totals:	22.19	0.0111	97.19		35.22

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Uncontrolled Ignition

Page 2 of 7

Company Name: VIM Recycling
Address City IN Zip: 29861 Old US Hwy. 33, Elkhart, IN 46516
CP#: 039-12174
Plt ID: 039-00538
Reviewer: David Howard

Diesel Engine (>250 and <600 HP)
(Olathe, 312 hp)

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity

MM Btu/hr

2.2

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.31	0.31	0.29	4.41	0.4	0.95
Potential Emission in tons/yr	2.98	2.98	2.79	42.38	3.46	9.13

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-1

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Emission Factor in lb/MMBtu	HAPs					
	Benzene	Toluene	Xylenes	Propylene	Formaldehyde	Acetaldehyde
	0.000933	0.00049	0.000285	0.002580	0.001180	0.000767
Potential Emission in tons/yr	0.00897	0.00471	0.00274	0.02479	0.01134	0.00737

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

**Diesel Engine (>600 HP)
(CBI, 800 hp)**

B. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity

MM Btu/hr

S= 0.5 = WEIGHT % SULFUR6.0

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.5	3.2	0.1	0.85
			(1.01S)	**see below		
Potential Emission in tons/yr	2.6	1.5	13.3	84.1	2.4	22.3

Methodology

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.

Emission Factor in lb/MMBtu	HAPs					
	Benzene	Toluene	Xylenes	Propylene	Formaldehyde	Acetaldehyde
	0.000776	0.000281	0.000193	0.002790	0.000079	0.000025
Potential Emission in tons/yr	0.02039	0.00738	0.00507	0.07332	0.00207	0.00066

Methodology

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-3

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Projected Actual Emissions

Diesel Engine (>250 and <600 HP)

(Olathe, 312 hp at 1040 hrs/yr)

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity

MM Btu/hr

2.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.29	4.41	0.4	0.95
Projected Actual Emission in tons/yr	0.35	0.35	0.33	5.03	0.41	1.08

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-1

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 1040 hr/yr / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

	HAPs					
	Benzene	Toluene	Xylenes	Propylene	Formaldehyde	Acetaldehyde
Emission Factor in lb/MMBtu	0.000933	0.00049	0.000285	0.002580	0.001180	0.000767
Projected Actual Emission in tons/yr	0.00106	0.00056	0.00033	0.00294	0.00135	0.00088

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 1040 hr/yr / (2,000 lb/ton)

Diesel Engine (>600 HP)
(CBI, 800 hp at 3640 hrs/yr)

B. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity

MM Btu/hr

S= 0.5 = WEIGHT % SULFUR

6.0

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.5 (1.01S)	3.2	0.1	0.85
Potential Emission in tons/yr	1.1	0.6	5.5	34.9	1.0	9.3

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1 and Table 3.4-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.

Emission Factor in lb/MMBtu	HAPs					
	Benzene	Toluene	Xylenes	Propylene	Formaldehyde	Acetaldehyde
	0.000776	0.000281	0.000193	0.002790	0.000079	0.000025
Potential Emission in tons/yr	0.02039	0.00738	0.00507	0.07332	0.00207	0.00066

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-3

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Appendix A: Emission Calculation Fugitive Dust

page 6 of 7

Storage Piles

$$E_f = 1.7(s/1.5) \cdot (365-p)/235 \cdot (f/15)$$

$$= 9.72 \text{ lb/ac/day}$$

where: s = 8.4 % silt content of material
 p = 125 days of rain greater than or equal to 0.01 inches
 f = 15% of wind greater than or equal to 12 mph

Storage pile	acreage	PTE (tpy)
1	3	1.30
2	2	1.30
3	3	1.30
4	1	1.30
total		5.21

Storage Pile Handling

$$E_f = k \cdot (0.0032) \cdot (U/5)^{1.3} \cdot (M/2)^{1.4}$$

k value for:

PM	PM10
0.74	0.35

Storage Pile	acreage	Moisture Content (% by weight)	Emission Factor (PM)	Emission Factor (PM10)	PTE PM (tpy)	PTE PM10 (tpy)
1	3	40	8.8E-05	4.2E-05	0.0009	0.0004
2	2	14	3.8E-04	1.8E-04	0.0038	0.0018
3	3	14	3.8E-04	1.8E-04	0.0038	0.0018
4	1	14	3.8E-04	1.8E-04	0.0038	0.0018

Unpaved Roads

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

$$\begin{aligned}
 &150 \text{ trip/hr} \times \\
 &0.037 \text{ mile/trip} \times \\
 &2 \text{ (round trip)} \times \\
 &8760 \text{ hr/yr} = \qquad \qquad \qquad 97236 \text{ miles per year}
 \end{aligned}$$

PM

$$\begin{aligned}
 \text{Method: } E_f &= \{k[(s/12)^{0.8}][(W/3)^b]/[(M_{dry}/0.2)^c]\}[(365-p)/365] \\
 &= 2.257 \text{ lb/mile}
 \end{aligned}$$

where:

k =	10	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
b =	0.5	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
c =	0.4	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
W =	35	tons average vehicle weight
M _{dry} =	10	surface material moisture content, %
p =	125	no. of days with at least 0.254mm of precipitation (See Fig. 13.2.2-1)

$$2.3 \text{ lb/mi} \times 97236 \text{ mi/yr} = \mathbf{109.71 \text{ tons/yr}}$$

PM₁₀

$$\begin{aligned}
 \text{Method: } E_f &= \{k[(s/12)^{0.8}][(W/3)^b]/[(M_{dry}/0.2)^c]\}[(365-p)/365] \\
 &= 0.679 \text{ lb/mile}
 \end{aligned}$$

where:

k =	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
b =	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
c =	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
W =	35	tons average vehicle weight
M _{dry} =	10	surface material moisture content, %
p =	125	no. of days with at least 0.254mm of precipitation (See Fig. 13.2.2-1)

$$0.679 \text{ lb/mi} \times 97236 \text{ mi/yr} = \mathbf{33.0 \text{ tons/yr}}$$

Attachment A

Fugitive Dust Control Plan Approved July 17, 2000

VIM Recycling, Inc.
29861 Old US Hwy 33
Elkhart, Indiana 46516

SECTION 1 – INTRODUCTION

The following control plan, when implemented, is designed to reduce uncontrolled fugitive dust generated from paved roadways and areas, unpaved roadways and areas, aggregate storage piles, and grinding and screening of wood outdoors.

The plan shall be implemented on a year-round basis until such a time as another plan is approved or ordered by the Indiana Department of Environmental Management.

The person on site who is responsible for implementing the plan is:

VIM Recycling, Inc.
Kenneth R. Will
P.O. Box 808
Goshen, Indiana 46527-0808

SECTION 2 – OUTDOOR GRINDING AND SCREENING

The following shall control fugitive particulate matter emissions from the outdoor grinding and screening of “recently live”¹ wood:

- (1) Spraying water, as necessary, during the grinding and screening operation to prevent visible fugitive dust.
- (2) Grinding and screening only “recently live” wood outdoors.
- (3) Grinding and screening “recently live” wood during periods when wind speeds, at the VIM property, measure less than ten (10) miles per hour. Wind speed shall be measured hourly while grinding and screening outdoors. In the event of the wind speeds exceeding ten (10) miles per hour during grinding and screening outdoors, operation shall stop until wind speeds slow down to less than ten (10) miles per hour.
- (4) Grinding and screening outdoors a maximum of eight (8) hours in any day.

SECTION 3 – PAVED ROADS AND AREAS

Dust from paved roads and areas will be controlled by sweeping and shall be performed every 14 days or more often to prevent visible fugitive dust from crossing the VIM property line, as determined by a trained employee², from these areas. Records of sweeping will be required.

Exceptions – Cleaning of paved roads and areas may be delayed by one day when:

¹ “recently live ” wood – wood, including trunk, branches and leaves, that has not been processed or cut into dimensional lumber, and has been stored no longer than sixty (60) days onsite.

² trained employee – an employee that has worked at the source at least one (1) month and has been trained in the appearance and characteristics of normal visible dust emissions for that specific process

- (a) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning.
- (b) The road segments or areas is closed or abandoned. Abandoned roads or areas will be barricaded to prevent vehicle access.
- (c) It is raining at the time of the scheduled cleaning.

SECTION 4 – UNPAVED ROADS AND AREAS

Unpaved roads and areas at the facility shall be sprayed with water, as necessary, for dust control to prevent fugitive dust for crossing the VIM property line. A trained employee shall determine visual particulate emission, visual observation shall be made twice daily, and record kept of these observations in the journal. Records of spraying water onto unpaved roads and area shall also be required.

Exceptions – Treating of unpaved roads and segments may be delayed by one day when:

- a. 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment,
- b. The road segments or areas are frozen or covered by ice, snow, or standing water.
- c. The road segments or areas are closed or abandoned. Abandoned roads or areas shall be barricaded to prevent vehicles from traveling on the roads or areas.

SECTION 5 – OPEN AGGREGATE STORAGE PILES

Open aggregate piles will consist of only landscape mulch and scrap wood. The use of water as a dust suppressant shall be the primary means of dust control. The water shall be applied, as necessary, to the aggregate storage piles to prevent emission of fugitive particulate matter from crossing the VIM property line. A trained employee shall determine visual particulate emission, visual observation shall be made twice daily, and record kept of these observations in the journal. Records of spraying water onto piles shall also be required.

Exceptions – Treating of aggregate storage piles may be delayed by one day when:

- a. 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment,
- b. The storage piles are frozen or covered by ice or snow.

SECTION 6 – MATERIAL HANDLING

Front-end loaders will be used to maintain the aggregate storage piles. Fugitive particulate matter from loading and unloading of outdoor aggregate storage piles shall be controlled by the following: spraying with water, as necessary when determined by a trained employee, and reduction of the free fall distance between the front-end loader and truck.

Fugitive particulate matter control from the loading and unloading of indoor storage piles shall be accomplished by the following: trucks shall be loaded with materials stored in the VIM building only within the building.

SECTION 7 – MONITORING AND RECORD KEEPING

Records shall be kept in a journal, which will be updated daily by the responsible official. The journals shall be kept in storage for a minimum of three (3) years and shall be available for inspection or copying upon reasonable prior notice. The following information will be required in the journal with each entry:

Grinding and screening outdoors:

- (1) Name of trained employee making observations
- (2) Wind speed prior to startup of grinding and screening outdoors
- (3) Hourly readings of wind speed while grinding and screening outdoors
- (4) Hours of operation for grinding and screening in a day

Paved roads and areas:

- (1) Name of trained employee making observations
- (2) Record of the dates when areas are swept

Unpaved roads and areas, and aggregate storage piles:

- (1) Name of trained employee making observations
- (2) Date and time the observations were made
- (3) Date and time when water is applied

SECTION 8 – COMPLIANCE SCHEDULE

This plan shall be fully implemented when construction is complete. Until that time, the plan shall be implemented within portions of the site where construction is considered complete. Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed. These activities shall be included in the journal.